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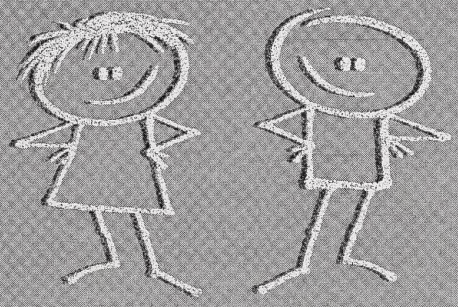
Mathematics 4

Module 3
Fractions and Decimals



Assignment Booklet 3A

Learning Technologies Branch

Alberta LEARNING

FOR TEACHER'S USE ONLY

Summary

	Total Possible Marks	Your Mark
Day 1	12	
Day 2	39	
Day 3	26	
Day 4	18	
Day 5	40	
Day 6	26	
Day 7	15	
Day 8	(1) 20	
	(2) 10	
	206	

Teacher's Comments

This document is intended for	
Students	✓
Teachers	✓
Administrators	
Home Instructors	✓
General Public	
Other	

Mathematics 4
Module 3: Fractions and Decimals
Assignment Booklet 3A
Learning Technologies Branch
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ASSIGNMENT BOOKLET 3A
MATHEMATICS 4 – MODULE 3:
FRACTIONS AND DECIMALS

Notes to the Home Instructor

Learning Tasks

The nine mathematics modules and the accompanying Assignment Booklets have been developed so that students become involved in a variety of learning tasks that help them develop mathematical skills, learn how to communicate mathematically, and become mathematical problem solvers.

When completing the assignments, students should work carefully and neatly. Students should do the activities in the Assignment Booklets **independently**. This will ensure that the teacher acquires a more accurate picture of the student's ability and understanding.

If the student is having difficulties, he or she should review the appropriate sections in the Student Module Booklet. The home instructor can assist the student by reviewing these sections with the student and encouraging him or her to explain, describe, or demonstrate (using manipulatives, drawings, and so on) his or her understanding of a particular concept or idea.

Assessment and Evaluation

A broad range of assessment tools will be used to gather information for the purpose of evaluating the student's knowledge and understanding of curriculum skills and concepts. It is important that the teacher learns how the student thinks about mathematics as well as what concepts and skills the student has mastered. Assignment Booklet questions, journal entries, performance assessments, observations by the home instructor, and student self-evaluation pages may all be used. As well, the teacher may also use a final test.

In order to give the student and home instructor feedback on the student's current level of achievement throughout the school year, the student's teacher may provide written comments and assign a grade at the end of each module. The mark for each module will be determined primarily by how well the student completes the assignments in the Assignment Booklets. However, other broad-based assessment techniques (journal entries, performance assessments, and so on) may also be used.

12

Day 1: Fractions

1. Turn to page 141 in your textbook and complete questions 9 and 10 of On Your Own.

(2)

On Your Own, Question 9

Which figures do **not** show halves? Circle your answers.

a. **b.** **c.** **d.** **e.** **f.**

On Your Own, Question 10

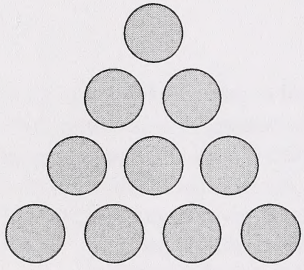
Which figures do **not** show fourths? Circle your answers.

a. **b.** **c.** **d.** **e.** **f.**

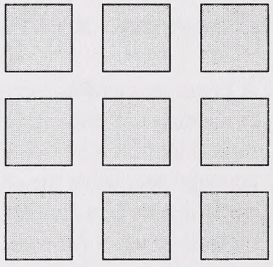
(1)

2. Which of the following sets shows ten **equal** parts? Circle the set.

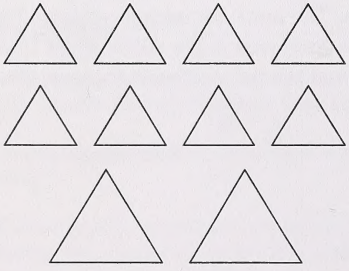
a.



b.

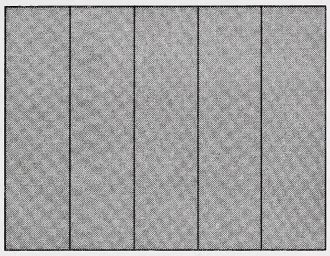


c.

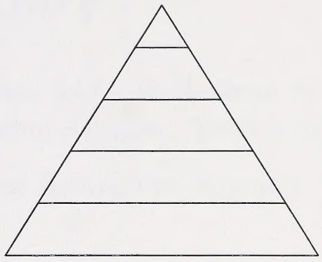


(1) **3.** Which of the following figures does **not** show five equal parts? Circle the set.

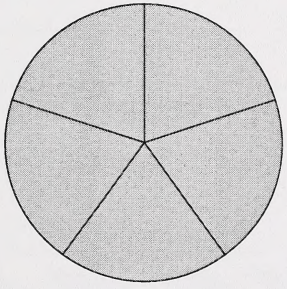
a.



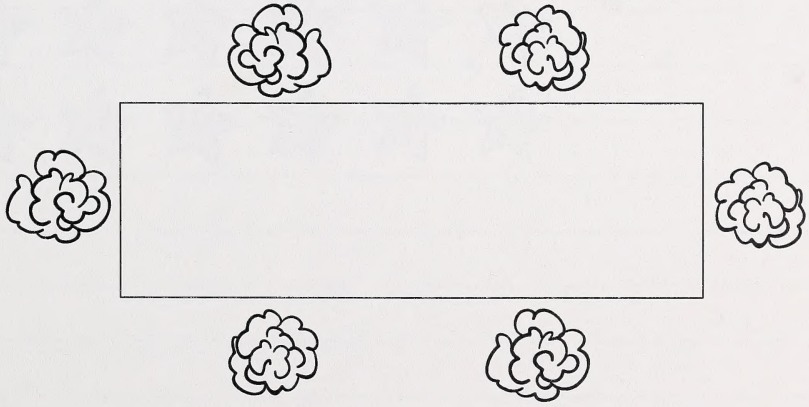
b.



c.

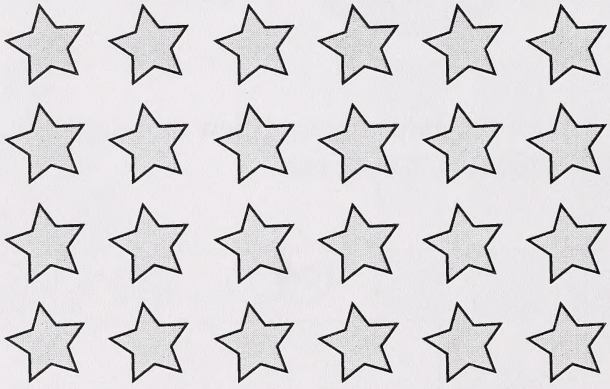


(2) **4.** Divide the garden space below into three equal parts. Label what you would grow in each part.



(3) **5.** Draw a figure or set that shows **four** equal parts.

(3) **6.** Divide this set into 12 equal parts.



39

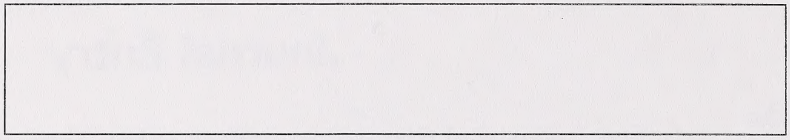
Day 2: Understanding Fractions

5

1. Journal Entry

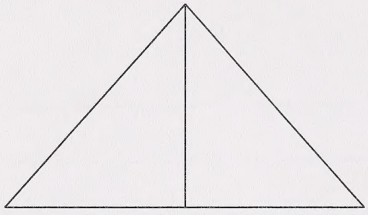
In Day 2 you used fractions to write a recipe. Now, think about how you could describe members of your family using fractions. Write at least six sentences using fractions that describe your family. For example, $\frac{2}{5}$ of my family have brown eyes.

(3) **2. a.** Divide this rectangle into **eight** equal parts.



b. Each part is called one _____ of the rectangle.

(3) **3.**



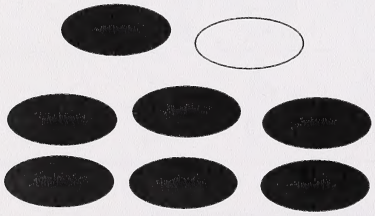
a. This figure is divided into _____ equal parts.

b. Each part is called _____.

c. Altogether there are two _____.

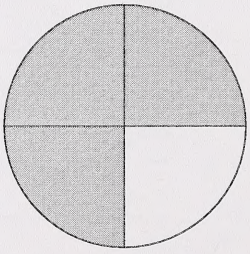
(6) **4.** What fraction of each figure or set is shaded? Write the fraction in the space below each figure.

a.



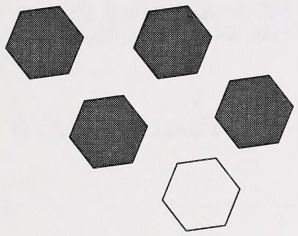
_____

b.



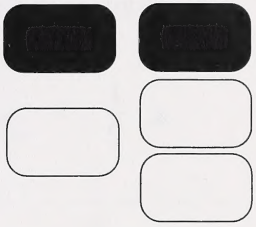
_____

c.



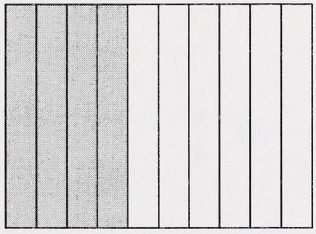
_____

d.



_____

e.



_____

f.

_____

5. Turn to page 140 in your textbook and complete On Your Own questions 6 and 7. Write the fraction for each colour shown on the flag.

On Your Own, Question 6

(2)

- green: _____
- white: _____

On Your Own, Question 7

(2)

- red: _____
- yellow: _____
- blue: _____
- green: _____

(8)

6. Draw each fraction as a shaded set or a shaded figure.

a. $\frac{1}{2}$

b. $\frac{3}{5}$

c. $\frac{4}{10}$

d. $\frac{4}{4}$

(4)

7. Turn to page 164 in your textbook and complete question 1 of Skill Bank.

Skill Bank, Question 1

a. _____

b. _____

c. _____

d. _____

8. Use the fraction $\frac{4}{5}$ to answer the following questions.

(1) **a.** Write the name of the fraction using words.

_____

(1) **b.** How many total parts does this fraction show? _____

(2) **c.** Draw this fraction and shade in the correct number of parts.

(1) **d.** How many parts out of the total does this fraction show? _____

(1) **9.** Write a fraction in which the denominator is 3 more than the numerator.

_____

26

Day 3: Decimals

1

1. Write a sentence that contains a **decimal number.**

_____

_____

3

2. In each decimal, circle the number that is in the **tenths** place.

a. 0.6 **b.** 9.82 **c.** 4.73

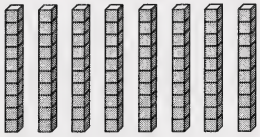
Use the leftover base ten blocks from the Appendix to answer questions 3 and 5.

4

3. Show this number using base ten blocks. Glue the cutouts in place.

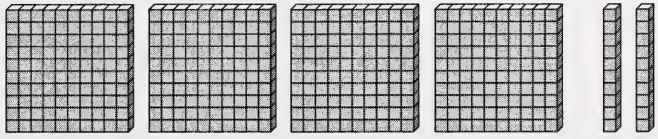
Hundreds	Tens	Ones	Tenths
		2.	2

4. Read the following base ten decimal numbers. Write them in both numbers and words.

(2) **a.** 

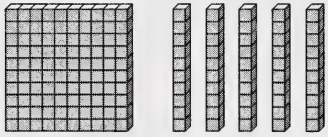
Words: _____

Numbers: _____

(2) **b.** 

Words: _____

Numbers: _____

(2) **c.** 

Words: _____

Numbers: _____

5. Show the following numbers with base ten blocks. Use the leftover base ten blocks from the Appendix.

a. 3.4

(4)

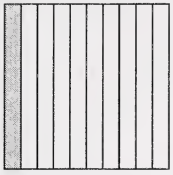
(4) **b.** 0.6

(4) **c.** 2.0

18

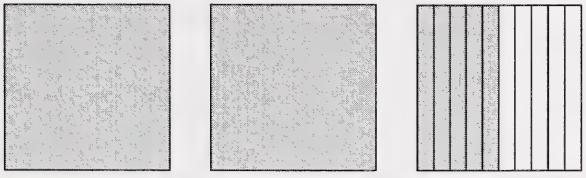
Day 4: Decimals Galore!

2

1. Explain why  stands for the number 0.1.

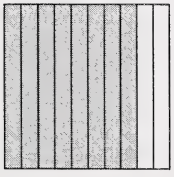
2. What decimal number is shown by these decimal squares? Circle the correct answer.

1

a. 

0.5, 2.5, 0.25, 5.2

1

b. 

8.0, 0.2, 0.8, 1.8

Use the leftover 10×10 grids from the Appendix to answer question 3.

3. Use 10×10 grids to make the following numbers. Paste the squares in the answer spaces.

(3) **a.** 0.6

(3) **b.** 2.3

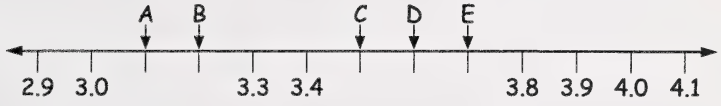
(3) **4.** Circle the decimal number that is **greater** in each pair.

a. 0.6 or 0.9

b. 1.3 or 1.2

c. 2.1 or 1.2

(5) **5.** Tell what decimal number belongs at each of the letters on the number line. Put your answers in the spaces below the number line.



A: _____

B: _____

C: _____

D: _____

E: _____

40

Day 5: Fractions Meet Decimals

5

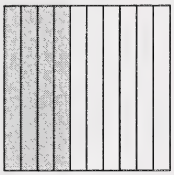
1. Journal Entry

Explain what you learned about different ways to show fractions and decimals.

(5)

2. Show the following numbers by using base ten cutouts from the back of this Assignment Booklet. Paste your answers in the spaces. Also, write the numbers in words as you would say them.

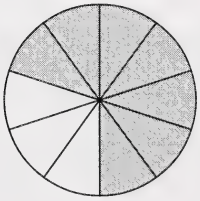
a.



Words: _____

(5)

b.

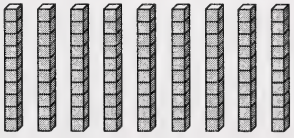


Words: _____

(5)

3. Show the following numbers by using the 10×10 grids from the back of this Assignment Booklet. Paste them in the spaces. Write the decimal number. Then write the numbers in words.

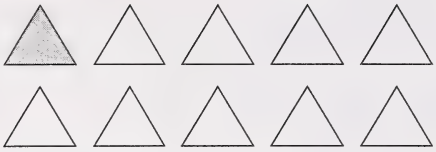
a.



Decimal number: _____

Words: _____

(5)

b. 

Decimal number: _____

Words: _____

(9)

4. Draw or build **three** other ways to show the following fraction or decimal without using any numbers. Use the cutouts from the back of this Assignment Booklet if you need to.

(6)

5. Ten houses were built on Elm Street. Three of the houses had green trim around the windows. Five houses had blue trim. The remaining houses had red trim. Describe the number of each kind of house with a **fraction** and a **decimal** number.

	Fraction	Decimal
Houses with green trim:	_____	_____
Houses with blue trim:	_____	_____
Houses with red trim:	_____	_____

26

Day 6: Fractions and Decimals—A Partnership

(2) **1.** Change the following fractions into decimals. Use numbers only.

a. $\frac{6}{10}$ = _____ **b.** one tenth = _____

(2) **2.** Change the following decimals into fractions. Use numbers only.

a. 0.8 = _____ **b.** two tenths = _____

(6) **3.** Fill in the chart with fractions, decimal numbers, and words.

Fraction	Decimal Number	Number in Words
	0.1	
$\frac{9}{10}$		
		four tenths

(3) **4.** Jeannie ate 0.5 of a chocolate bar. Her friend Naima ate $\frac{5}{10}$ of the same bar. Did they share the chocolate bar equally? Explain your answer.

_____

_____

_____

_____

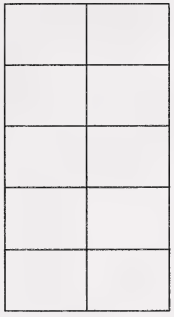
_____

(5) **5.** For these chocolate bars, the decimal tells how much of each one has been eaten. Shade in the amount eaten.

a.

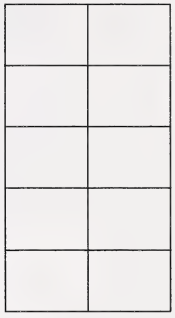
0.9

b.



0.6

c.

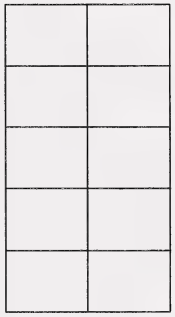


0.8

d.

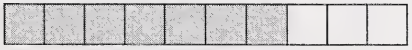
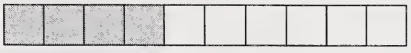
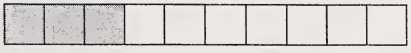
0.7

e.



0.2

(8) **6.** Give the fraction and decimal for each of the following.

	Fraction Number	Decimal Number
		
		
		

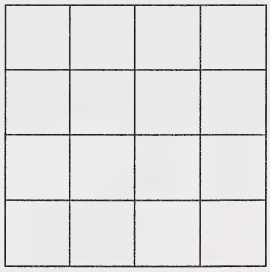
(15)

Day 7: Problem Solving

Find solutions for the following problems. Make each problem simpler in some way to help you solve it.

(5)

1. How many squares of all sizes are there in the figure below?



(10)

2. Ten sports teams are meeting for a 5-day summer camp to improve their playing skills. The teams are staying in a local hotel. Each day, each team pays $15.00 for a shuttle bus ride to the arena, $13.00 for equipment rentals, $4.00 for water bottles and $5.00 for the use of the showers at the arena. How much money is spent by the ten teams over the course of the summer camp?

Day 8: Assessing What You Know (I)

Home Instructor's Assessment Page for Day 8

Directions to the Home Instructor

Remove this sheet from the Assignment Booklet. Use the Checklist and Comments sections to help evaluate the student's work. When the Day 8 activities have been completed, firmly attach this sheet to Assignment Booklet 3A.

Student's Name _____

Home Instructor _____ Date _____

Indicate in the Checklist and Comments sections what you observe and hear as the student works through the assessment task. Encourage the student to "think out loud" as he or she works. As you observe, you may wish to use questions or prompts like the following to help determine the student's level of understanding.

- Can you explain what the fraction means?
- How do you get the fraction numbers from the picture?
- How do you make a picture from the fraction numbers?
- How do base ten blocks show the parts of a decimal number?
- What does the decimal point mean?
- How do the parts of a fraction relate to a decimal number?

Checklist

A. The student can clearly explain the parts of a fraction.	☐ Yes	☐ Not yet
B. The student can correctly convert fraction pictures into numbers, and vice versa.	☐ Yes	☐ Not yet
C. The student can correctly read and write fractions in words.	☐ Yes	☐ Not yet
D. The student can correctly translate base ten blocks into decimal numbers (tenths) and vice versa.	☐ Yes	☐ Not yet
E. The student can correctly read and write decimal numbers (tenths) in words.	☐ Yes	☐ Not yet
F. The student can correctly convert fractions to decimals and vice versa.	☐ Yes	☐ Not yet

Comments

Add any comments you have regarding the student's performance on the assessment task or any other information about the student's learning experiences in this module that you would like to share with the teacher.

_____

_____

_____

_____

_____

_____

_____

_____

(30)

Day 8: Assessing What You Know (I)

Student's Assessment Page for Day 8

Student's Name _____

(20)

Part 1: Showing What You Can Do

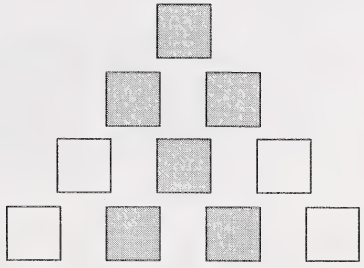
Note: You may use any manipulatives or cut-out learning aids available to help solve the following problems.

At the back of this Assignment Booklet you will find a page of base ten blocks for your Day 8 Assignment. Pull out the page and cut out the base ten blocks. Use them for any questions that require them.

Fractions

(2)

1. Write the **fraction** shown by the picture in both numbers and words. Also, say the name of the fraction out loud for your home instructor.



Numbers: _____

Words: _____

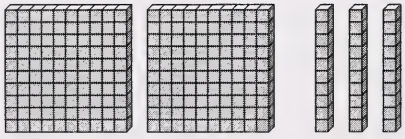
(4) **2.** Make a picture that shows the fraction $\frac{3}{4}$. Also, write the fraction in words and say it out loud for your home instructor.

Picture:

Words: _____

Decimals

(2) **3.** Read the base ten number below and say it out loud for your home instructor. Then write the decimal in numbers and words.



Numbers: _____

Words: _____

(4) **4.** Write the decimal number 0.5 in words and say it out loud for your home instructor. Then show the number using base ten cutouts or draw a picture.

Words: _____

Base Ten Blocks or Picture:

Relating Fractions and Decimals

(4) **5.** Write the following fraction as a decimal number. Explain your thinking to your home instructor. Use base ten cutouts or draw a picture to show your answer.

$\frac{2}{10} =$ _____

(4) **6.** Write the following decimal number as a fraction. Explain your thinking to your home instructor. Use base ten cutouts or draw a picture to show your answer.

0.9 = _____

(10)

Part 2: Basic Number Facts

This section is made up of two timed tests. Ask your home instructor to time you as you do each test. Wait for your home instructor to tell you when to begin. **Do not mark these tests. They will be marked by your teacher.**

(5)

1. Addition/Subtraction Number Facts
Timed Test: 2 minutes

8 − 4	3 + 6	1 + 9	12 − 5	7 + 8
5−2=	4+0=	6+6=	13−7=	8−1=
9 + 6	4 − 3	2 + 8	7 − 0	4 + 9
5−5=	18−9=	8+8=	6+5=	2+3=
14 − 7	11 − 3	5 + 8	6 − 4	16 − 9

STOP

If you finish before the two minutes are up, check your answers. Wait for your home instructor to tell you when to begin the next test.

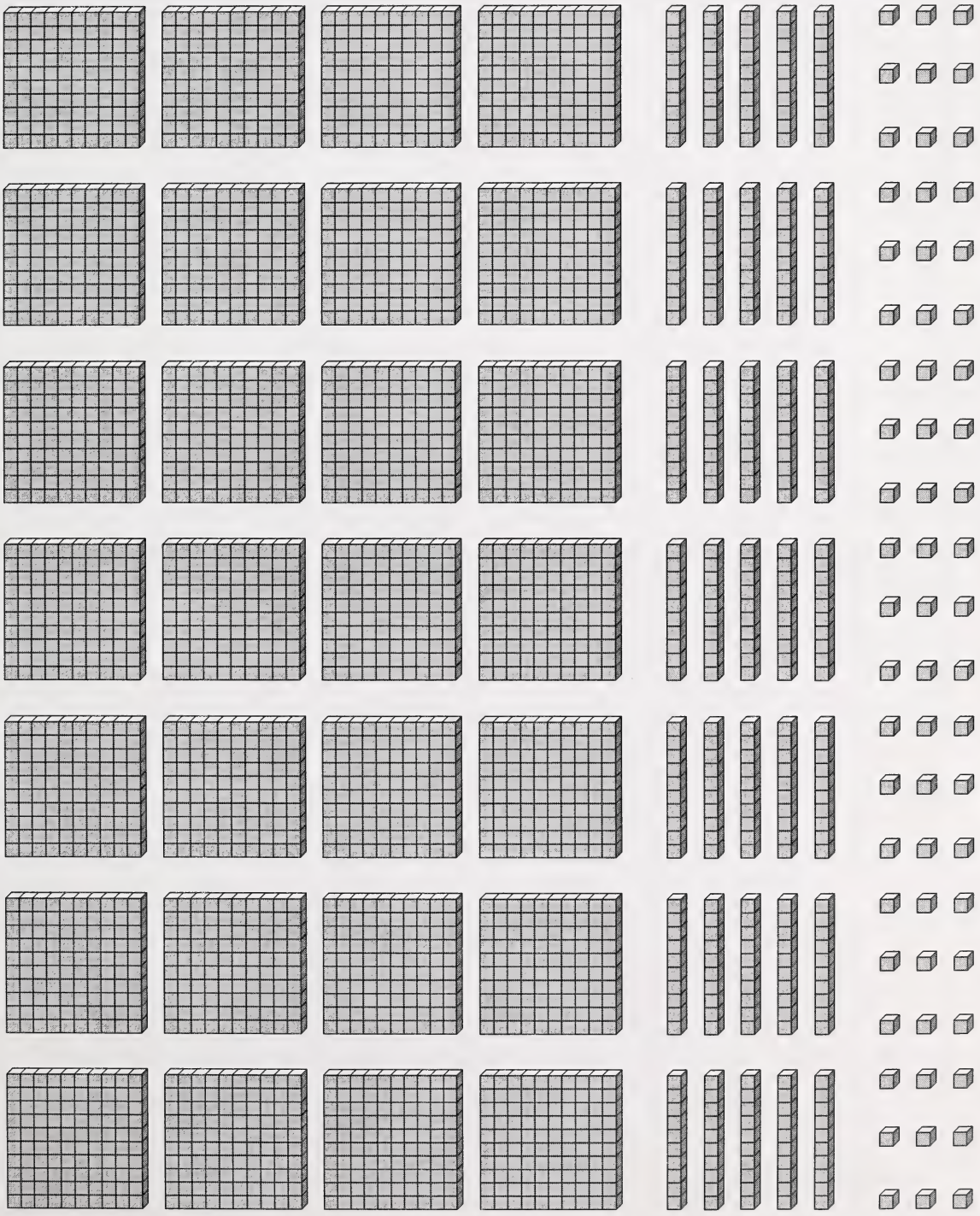
(5) **2. Multiplication Number Facts**
Timed Test: 2 minutes

7 × 1	5 × 4	2 × 6	3 × 7	4 × 4
5×0=	3×3=	6×7=	4×3=	2×5=
2 × 2	5 × 3	4 × 7	6 × 3	5 × 5
4×6=	1×1=	3×2=	7×7=	5×6=
1 × 3	0 × 6	2 × 5	6 × 6	4 × 2

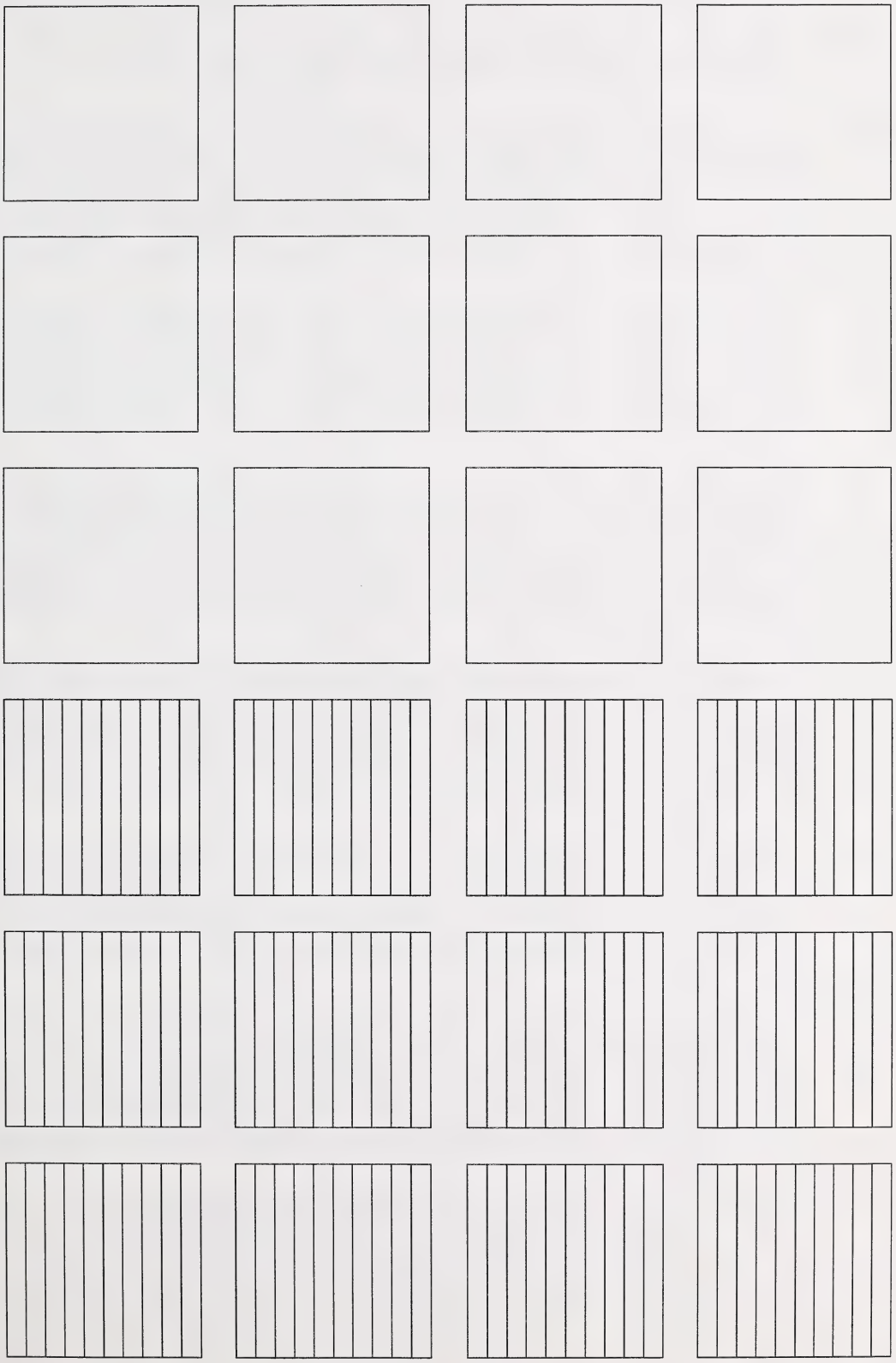
STOP If you finish before the two minutes are up, check your answers.

Cut-Out Learning Aids

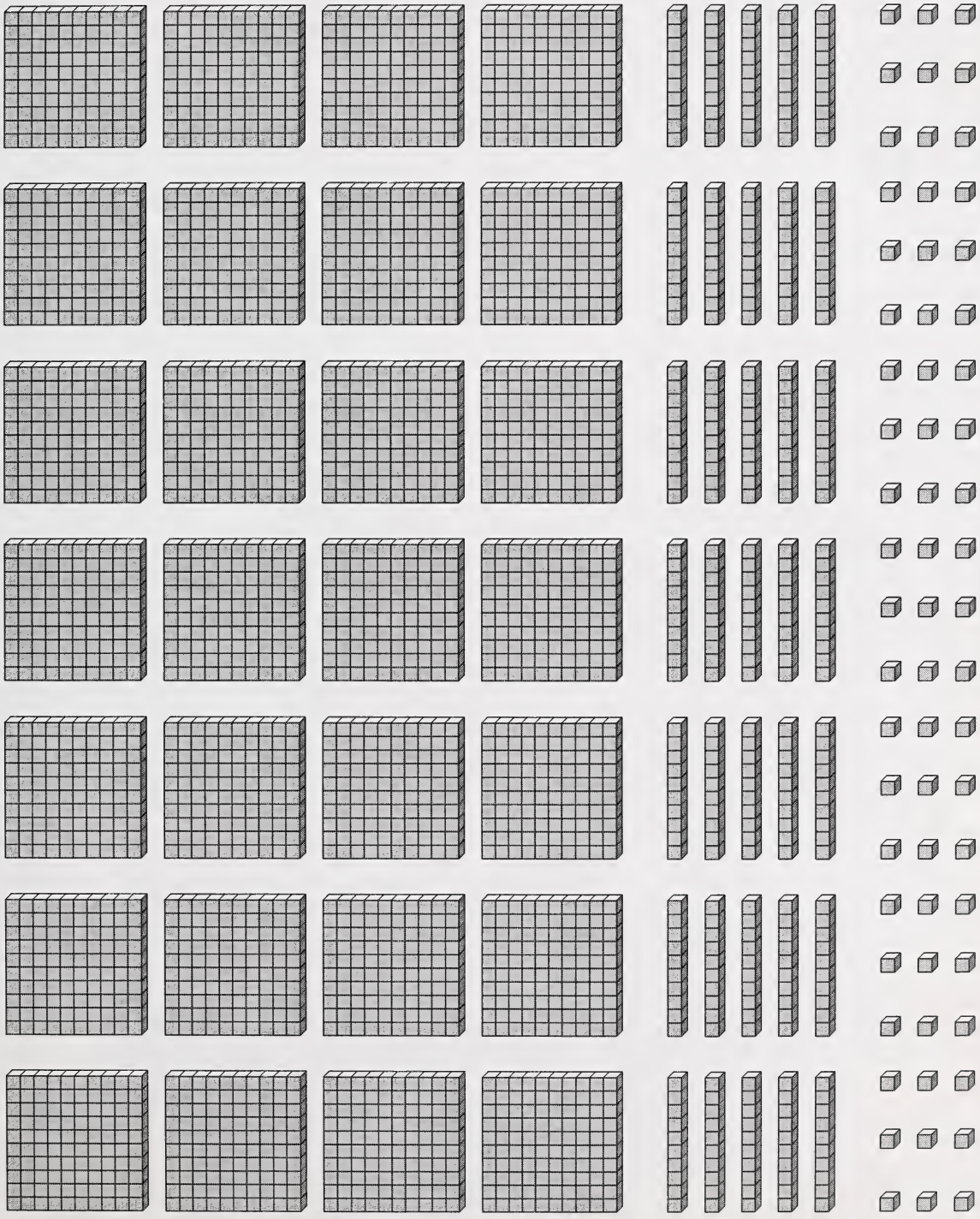
Day 5 Assignment: Base Ten Blocks



Day 5 Assignment: Lined Squares



Day 8 Assignment: Base Ten Blocks



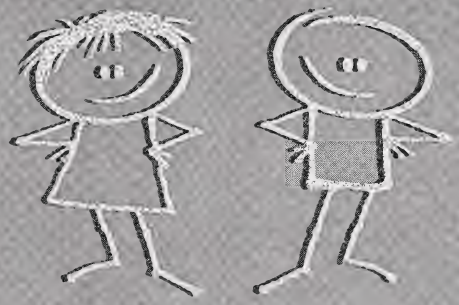
Mathematics 4
Assignment Booklet 3A
Module 3

LRDC

2000

Mathematics 4

Module 3
Fractions and Decimals



Assignment Booklet 3B

Learning Technologies Branch

Alberta LEARNING

FOR TEACHER'S USE ONLY

Summary

	Total Possible Marks	Your Mark
Day 9	23	
Day 10	20	
Day 11	21	
Day 12	21	
Day 13	45	
Day 14	(1) 42	
	(2) 57	
Day 15	(1) 17	
	(2) 10	
	255	

Teacher's Comments

This document is intended for	
Students	✓
Teachers	✓
Administrators	
Home Instructors	✓
General Public	
Other	

Mathematics 4
Module 3: Fractions and Decimals
Assignment Booklet 3B
Learning Technologies Branch
ISBN 0-7741-1807-5

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ASSIGNMENT BOOKLET 3B
MATHEMATICS 4 – MODULE 3:
FRACTIONS AND DECIMALS

Notes to the Home Instructor

Learning Tasks

The nine mathematics modules and the accompanying Assignment Booklets have been developed so that students become involved in a variety of learning tasks that help them develop mathematical skills, learn how to communicate mathematically, and become mathematical problem solvers.

When completing the assignments, students should work carefully and neatly. Students should do the activities in the Assignment Booklets **independently**. This will ensure that the teacher acquires a more accurate picture of the student's ability and understanding.

If the student is having difficulties, he or she should review the appropriate sections in the Student Module Booklet. The home instructor can assist the student by reviewing these sections with the student and encouraging him or her to explain, describe, or demonstrate (using manipulatives, drawings, and so on) his or her understanding of a particular concept or idea.

Assessment and Evaluation

A broad range of assessment tools will be used to gather information for the purpose of evaluating the student's knowledge and understanding of curriculum skills and concepts. It is important that the teacher learns how the student thinks about mathematics as well as what concepts and skills the student has mastered. Assignment Booklet questions, journal entries, performance assessments, observations by the home instructor, and student self-evaluation pages may all be used. As well, the teacher may also use a final test.

In order to give the student and home instructor feedback on the student's current level of achievement throughout the school year, the student's teacher may provide written comments and assign a grade at the end of each module. The mark for each module will be determined primarily by how well the student completes the assignments in the Assignment Booklets. However, other broad-based assessment techniques (journal entries, performance assessments, and so on) may also be used.

(23)

Day 9: New Fractions

(2) **1.** Write the following fractions in numbers.

a. three hundredths _____

b. forty-six hundredths _____

(2) **2.** Write the following fractions in words.

a. $\frac{9}{100}$ _____

b. $\frac{75}{100}$ _____

(4) **3.** Turn to page 155 in your textbook and complete Practise Your Skills questions 9, 10, 11, and 12.

Practise Your Skills, Questions 9, 10, 11, and 12

9. _____

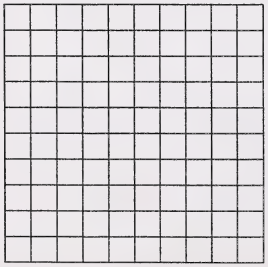
10. _____

11. _____

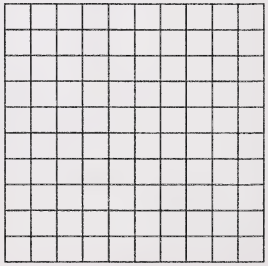
12. _____

(8) **4.** Colour or shade the 10×10 grids to show the following fractions.

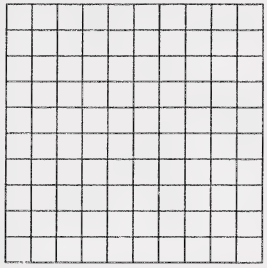
a. $\frac{91}{100}$



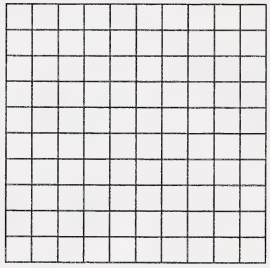
b. $\frac{28}{100}$



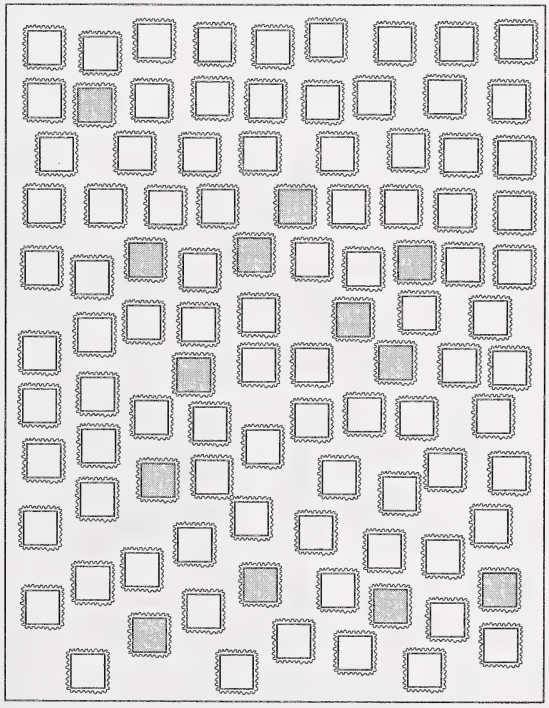
c. $\frac{6}{100}$



d. $\frac{11}{100}$



(2) **5.** On the page of stamps below, the new stamps are shaded and the used stamps are not shaded. What fraction of the stamps are **new**? Write your answer in both numbers and words.



Numbers: _____

Words: _____

(5)

6.

Journal Entry

Think of a time when you might work with a set of 100 (for example, a set of 100 trees, a book with 100 pages, a party for 100 people, a trip of 100 km). Tell about how the set could be divided into fractions showing hundredths. For example, on a 100-km trip, you might have gone 25 km one day. This means $\frac{25}{100}$ of the total distance.

(20)

Day 10: New Decimals

(3) **1.** Beside each decimal, write the number that is in the **hundredths** place.

a. 0.35 _____ is in the hundredths place.

b. 73.80 _____ is in the hundredths place.

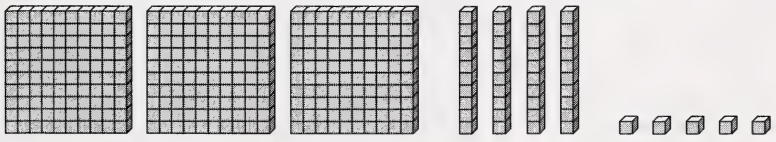
c. 624.19 _____ is in the hundredths place.

(6) **2.** Write the decimal numbers shown by the base ten models in both numbers and words.

a.

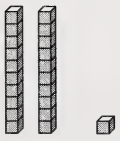
Numbers: _____

Words: _____

b. 

Numbers: _____

Words: _____

c. 

Numbers: _____

Words: _____

3. Use the leftover base ten blocks from the Appendix to build the following decimal numbers in the answer spaces.

a. 0.16

(3)

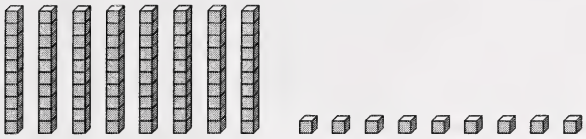
(3) **b.** 2.73

(3) **c.** 1.08

(2)

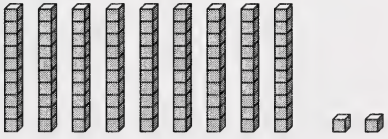
4. Becky and Fatima set up base ten blocks to show their heights in metres. Write the height of each girl in numbers.

Becky



Numbers: _____

Fatima



Numbers: _____

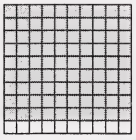
21

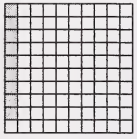
Day 11: Working with Tenths and Hundredths

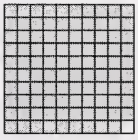
At the back of the Assignment Booklet you'll find two pages of cutouts for your Day 11 Assignment. Remove the pages now and cut out the base ten blocks and 10×10 grids. You'll use them in some of the following questions.

(1)

1. Circle the 10×10 grid below that matches the base ten number .

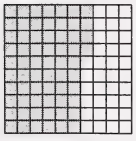
a. 

b. 

c. 

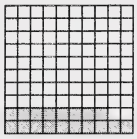
2. Change the following 10×10 fractions into base ten decimals. Use your base ten cutouts. Also write the number in words.

(4)

a.  =

Words: _____

(4)

b.  =

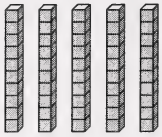
Words: _____

3. Change the following base ten decimals into 10×10 fractions. Use your 10×10 cutouts.

a. ▯ =

(3)

(3)

b. 

4. Show this word number as a base ten decimal **and** as a 10×10 fraction. Use your cutouts.

fifty-six hundredths

(3)

21

Day 12: Fractions and Decimals—Number Neighbours

(2)

1. Write the following numbers in the place-value charts.

a. $\frac{94}{100}$

Ones	Tenths	Hundredths

b. 0.18

Ones	Tenths	Hundredths

(2)

2. Write the following fractions in **words**.

a. $\frac{35}{100}$ _____

b. $\frac{9}{100}$ _____

(2) **3.** Write the following word numbers as **decimals**.

a. seventy-six hundredths _____

b. eleven hundredths _____

(3) **4.** Write each fraction as a **decimal**.

a. $\frac{27}{100} =$ _____

b. $\frac{6}{100} =$ _____

c. $\frac{99}{100} =$ _____

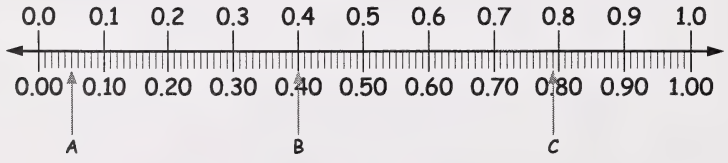
(3) **5.** Write the following decimals as **fractions**.

a. $0.15 =$ _____

b. $0.30 =$ _____

c. $0.09 =$ _____

(3) **6. a.** Write the decimal numbers that are located at points A, B, and C on the number line.



A: _____

B: _____

C: _____

(3) **b.** Find the following decimal numbers on the number line above. Draw arrows and label them with the letters D, E, and F to show where the numbers are.

D: 0.02
E: 0.56
F: 0.93

(3) **7.** Colleen sold $\frac{70}{100}$ of her school chocolate bars, while Maria sold 0.70 of hers. Did they sell the same number of chocolate bars or not? Explain your answer.

45

Day 13: Decimal Dollars

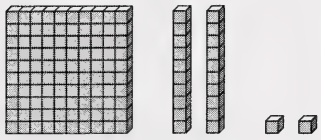
5

1. Journal Entry

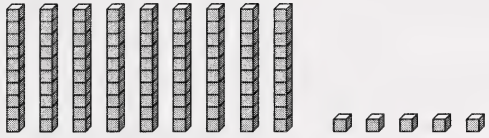
In your own words, explain how money and decimal numbers are related.

(3)

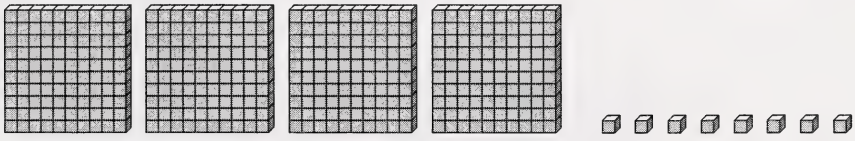
2. Write the following base ten money amounts in **words** (e.g., two dollars and sixteen cents).

a. 

Words: _____

b. 

Words: _____

c. 

Words: _____

Use the leftover 10×10 squares from the Appendix to answer question 3.

3. Show the following money amounts using 10×10 squares.

a. 2 dollars and 20 cents

(3)

(3) **b.** 0 dollars and 55 cents

(3) **c.** $1.39

(3) **4.** How many dollars and cents are the following amounts? Answer in **words** and **numbers** (e.g. 2 dollars and 55 cents).

a. eighteen hundredths of a dollar

_____

b. one and two hundredths dollars

_____

c. seventy-seven hundredths of a dollar

_____

(4) **5.** Write the following money amounts in **decimals** with dollar signs ($).

a. 98¢ _____ **b.** 4¢ _____

c. 125¢ _____ **d.** 66¢ _____

(4) **6.** Write these money amounts using the **cents** sign (¢).

a. $0.33 _____ **b.** $1.14 _____

c. $0.01 _____ **d.** $5.00 _____

(3) **7.** Write the following money amounts in **decimal** numbers with dollar signs.

a.

_____

b. 1 quarter + 2 dimes + 3 pennies _____

c.

_____

(10)

8. Give the fraction and the decimal for each money amount. Use the $ for the decimal.

Amount	Fraction	Decimal
93¢		
84¢		
12¢		
45¢		
36¢		

(4)

9. Add these numbers quickly in your head. (Count by quarters.)

a. $50 + 75 + 50 =$ _____

b. $225 + 25 + 50 =$ _____

c. $25 + 75 + 75 + 25 =$ _____

d. $150 + 25 + 50 =$ _____

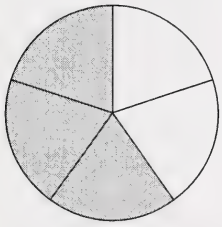
Day 14: Putting It All Together

42

Part 1: Reviewing the Concepts

Use what you know about fractions and decimals to complete the following questions. Look back in the Student Module Booklet if you need to review any of the concepts you have learned. You are to complete **all** of the questions in Part 1.

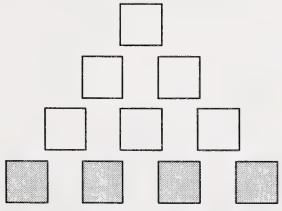
(1) **1.** Write in **numbers** the fraction shown by the shaded picture below.



Number: _____

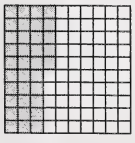
(2) **2.** Write in **numbers** the fraction shown by each picture.

a.



Number: _____

b.



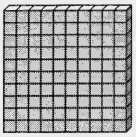
Number: _____

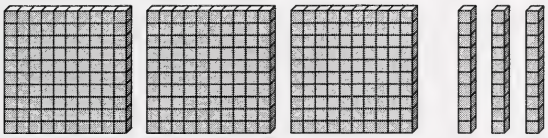
3. Make shaded pictures to show the following fractions.

(3) **a.** $\frac{9}{10}$

(3) **b.** $\frac{62}{100}$

4. Write the following base ten decimals in **numbers** and **words**.

(Remember that  =1.)

(2) **a.** 

Numbers: _____

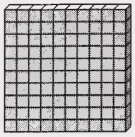
Words: _____

(2) **b.**

Numbers: _____

Words: _____

5. Show the following decimal numbers using base ten cutouts.

Remember that  =1. Use the base ten blocks for your Day 14 Assignment that are found at the back of this Assignment Booklet.

(3) **a.** 0.6

(3) **b.** 1.03

(2) **6.** Write the following fractions as **decimal** numbers.

a. $\frac{5}{10} =$ _____

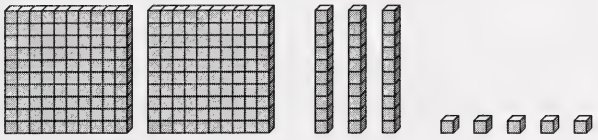
b. $\frac{7}{100} =$ _____

(2) **7.** Write the following decimals as **fraction** numbers.

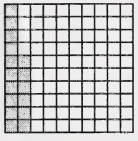
a. $0.93 =$ _____

b. $0.1 =$ _____

(2) **8.** Write the following base ten and 10×10 money amounts in **dollars** and **cents** using **words** (e.g. one dollar and twenty-five cents).

a. 

Words: _____

b. 

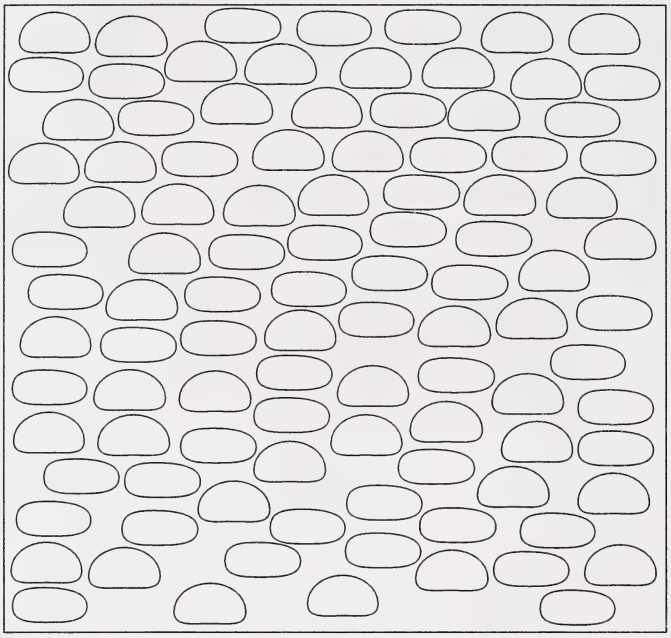
Words: _____

(2) **9.** Write the following money amounts as **decimal** numbers with dollar signs ($).

a. $50¢ =$ _____

b. eight dollars and seventy-five cents = _____

(5) **10.** Peter has 100 candies.



a. Colour 6 hundredths blue.
b. Colour 23 hundredths red.
c. Colour 18 hundredths green.
d. Colour 11 hundredths purple.

e. How many hundredths are left? _____

(10) **11.** Give the fraction and the decimal for each of the following numbers:

	Fraction	Decimal
a. two hundredths	_____	_____
b. fifty-two hundredths	_____	_____
c. ninety-six hundredths	_____	_____
d. forty-five hundredths	_____	_____
e. twenty-seven hundredths	_____	_____

57

Part 2: Challenge Activities

Choose **either** Activity A **or** Activity B. You may do both if you wish.

Activity A

37

Important Note: Choose **THREE** of the following six questions to complete. You do not have to do all six. Read all the questions and choose the THREE that interest you most. Have fun!

1

1. Write the smallest number you can think of, either as a fraction or a decimal. The number must be greater than zero.

_____

2. Turn to page 152 in your textbook and complete question 3.a. of On Your Own.

- _____
- _____
- _____

3

3. Turn to page 163 in your textbook and complete question 6.

_____

_____

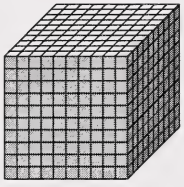
_____

_____

2

(2) **4.** Study the pattern in the place-value chart (see the arrows and names). Fill in the missing names where the question marks (?) are.

?	Hundreds	Tens	Ones	Tenths	Hundredths	?

(4) **5.** If you make the large base ten block  stand for **ones**, which base ten blocks will stand for **tenths** and **hundredths**? Explain your thinking.

6. Use a dictionary to find the following:

- 4 five-letter words
- 4 eight-letter words
- 4 ten-letter words

Write the words in the chart that follows. Tell what fraction of the letters in each word are vowels and what fraction are consonants.

(20) **a.**

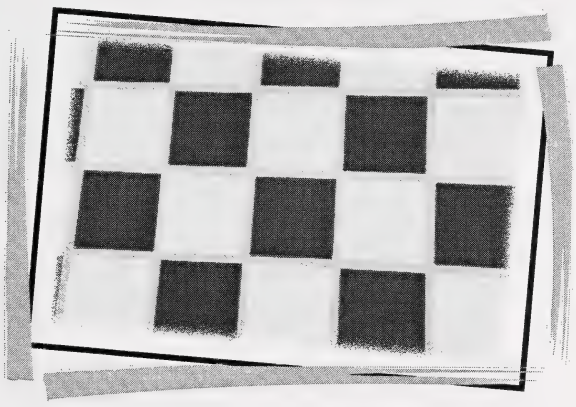
		Fraction of letters that are	
	Word	Vowels	Consonants
5-letter words			
8-letter words			
10-letter words			

(5) **b.** Based on your data, what patterns do you see? (For example, do words usually have more vowels than consonants or about the same of each?)

20

Activity B: Decimal Design

A busy tile company wants to advertise the many colours of stone and ceramic tile that they sell. The supervisor of the company wants to display a large tile floor at the next city trade fair. This display would show the public some of the colourful tiles that are available for use in their homes.



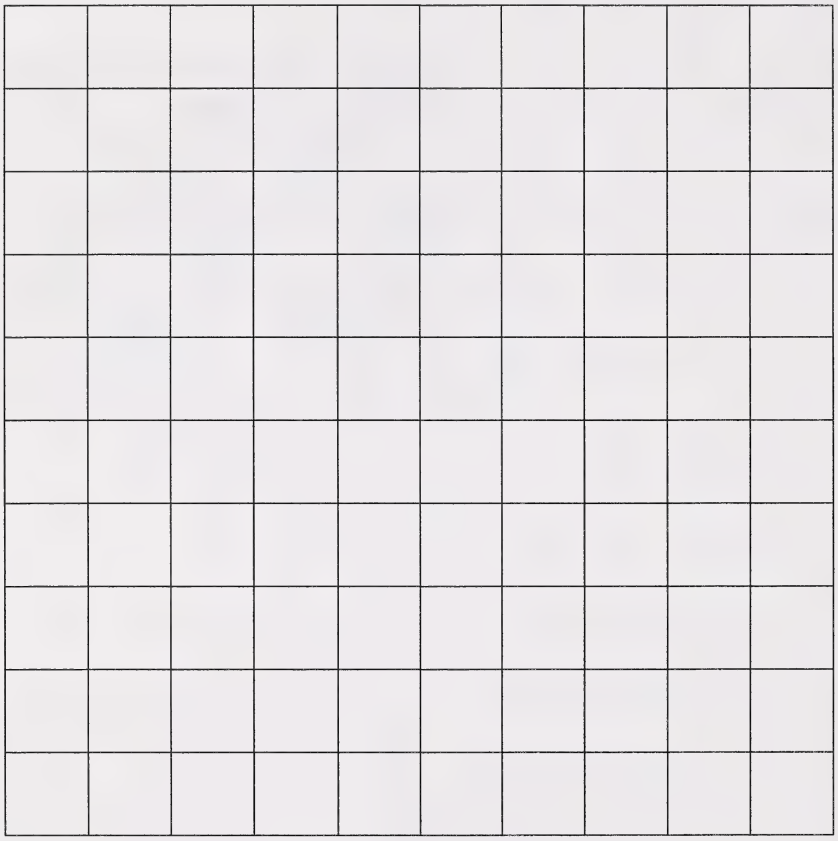
Your job at the company is to create a pattern on a large area of **100 square** tiles.

You must follow the supervisor's rules about this display:

- You must use **five** different colours.
- Out of 100 tiles
  - **0.25 will be Colour A**
  - **0.30 will be Colour B**
  - **0.15 will be Colour C**
  - **0.25 will be Colour D**
  - **0.05 will be black tiles**
- Each tile must be only one colour (no half squares!).
- An attractive repeated pattern must be used.
- The tile colours must not be arranged in solid blocks of colour—alternate the colours in a pattern as much as possible.

Choose five different colours of pencil crayons for your tiles. You may want to practise creating your pattern on your own piece of paper before you do your "good" copy in the grid below.

Decimal Tile Design



Day 15: Assessing What You Know

Home Instructor's Assessment Page for Day 15.

Directions to the Home Instructor

Remove this sheet from the Assignment Booklet. Use the Checklist and Comments sections to help evaluate the student's work. When the Day 15 activities have been completed, firmly attach this sheet to Assignment Booklet 3B.

Student's Name _____

Home Instructor _____ Date _____

Indicate in the Checklist and Comments sections what you observe and hear as the student works through the assessment task. Encourage the student to "think out loud" as he or she works. As you observe, you may wish to use questions or prompts like the following to help in determining the student's level of understanding.

- Can you connect the parts of the fraction to the words and picture?
- Does putting a decimal number into words help you recognize place values?
- Which part of a fraction tells you how many decimal places you need when you change a fraction to a decimal?
- What does a decimal point do in a money amount?

Checklist

A. The student can correctly convert fraction pictures into numbers (tenths and hundredths) and vice versa.	☐ Yes	☐ Not yet
B. The student can correctly read and write fractions (tenths and hundredths) in both words and numbers.	☐ Yes	☐ Not yet
C. The student can correctly translate base ten blocks into decimal numbers (tenths and hundredths) and vice versa.	☐ Yes	☐ Not yet
D. The student can correctly read and write decimal numbers (tenths and hundredths) in both words and numbers.	☐ Yes	☐ Not yet
E. The student can correctly convert fractions to decimals (tenths and hundredths) and vice versa.	☐ Yes	☐ Not yet
F. The student can correctly read and write money amounts as decimal numbers.	☐ Yes	☐ Not yet

Comments

Add any comments you have regarding the student's performance on the assessment task or any other information about the student's learning experiences in this module that you would like to share with the teacher.

_____

_____

_____

_____

(27)

Day 15: Assessing What You Know

Student's Assessment Page for Day 15

Student's Name _____

(17)

Part 1: Showing What You Can Do

Note: You may use any manipulatives or cut-out learning aids available to help solve the following problem.

Complete the following questions about fractions, decimals, and money.

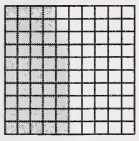
(3)

1. Draw a shaded picture to show the fraction. Also, say the name of the fraction out loud for your home instructor and write it in words.

$\frac{9}{10}$ Picture:

Words: _____

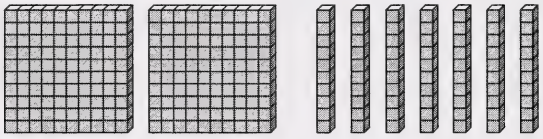
(2) **2.** Write the fraction shown by the picture below in both **numbers** and **words**. Also, say the fraction out loud for your home instructor.



Numbers: _____

Words: _____

(2) **3.** Write the following base ten decimal in **numbers** and **words**.



Numbers: _____

Words: _____

4. Show this decimal number in **base ten blocks**. Use the base ten cutouts for your Day 15 Assignment. Also write the number in **words**.

0.55

(4) Base ten blocks:

Words: _____

(3) **5.** Fill in the blanks of the statements about this decimal number.

1.38

a. 1 is in the _____ place.

b. 3 is in the _____ place.

c. 8 is in the _____ place.

(1) **6.** Write the following fraction as a **decimal** number.

$\frac{2}{10} =$ _____

(1) **7.** Write the following decimal as a **fraction**.

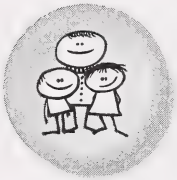
$0.04 =$ _____

(1) **8.** Write the following money amount as a **decimal** number with a dollar sign ($).

four dollars and thirty cents _____

(10)

Part 2: Basic Number Facts



This section is made up of two timed tests. Ask your home instructor to time you as you do each test. Wait for your home instructor to tell you when to begin. **Do not mark these tests. They will be marked by your teacher.**

(5)

1. Addition/Subtraction Number Facts
Timed Test: 2 minutes

3 + 6	9 + 2	4 − 3	5 + 5	10 − 6
2 − 0 =	8 + 7 =	7 − 5 =	17 − 9 =	5 + 6 =
4 + 8	6 − 6	7 + 7	3 − 2	0 + 9
5 + 2 =	8 − 1 =	14 − 6 =	12 − 9 =	6 + 7 =
1 + 1	9 − 5	16 − 8	9 + 4	11 − 3

If you finish before the two minutes are up, check your answers. Wait for your home instructor to tell you when to begin the next test.

(5) **2. Division Number Facts**
Timed Test: 2 minutes

$3\overline{)9}$	$5\overline{)20}$	$2\overline{)12}$	$7\overline{)35}$	$1\overline{)4}$
$28 \div 4 =$	$12 \div 6 =$	$3 \div 3 =$	$4 \div 2 =$	$21 \div 7 =$
$5\overline{)25}$	$4\overline{)16}$	$3\overline{)12}$	$6\overline{)30}$	$2\overline{)8}$
$7 \div 1 =$	$6 \div 6 =$	$15 \div 3 =$	$10 \div 2 =$	$24 \div 6 =$
$1\overline{)1}$	$4\overline{)20}$	$6\overline{)36}$	$2\overline{)4}$	$3\overline{)6}$

If you finish before the two minutes are up, check your answers.

Part 3: Thinking About What You Know

Part 3 gives you a chance to talk about your learning in Module 3. Look back through the Student Module Booklet. What new ideas and skills have you learned? Which ideas did you find hard to understand? Which things did you enjoy most? Are there ideas you would like to learn more about? You might wish to discuss these questions with your home instructor.

Now, using complete sentences, finish the following paragraph starters. You may wish to talk over your ideas with your home instructor before you begin writing.

1. I think this module is mainly about _____

_____

_____

_____

_____

2. Some things I learned in this module are _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

3. One thing I liked about this module is _____

_____

_____

_____

_____

4. Something I don't really understand is _____

_____

_____

_____

_____

_____

5. Something I would like to learn more about is _____

_____

_____

_____

_____

_____

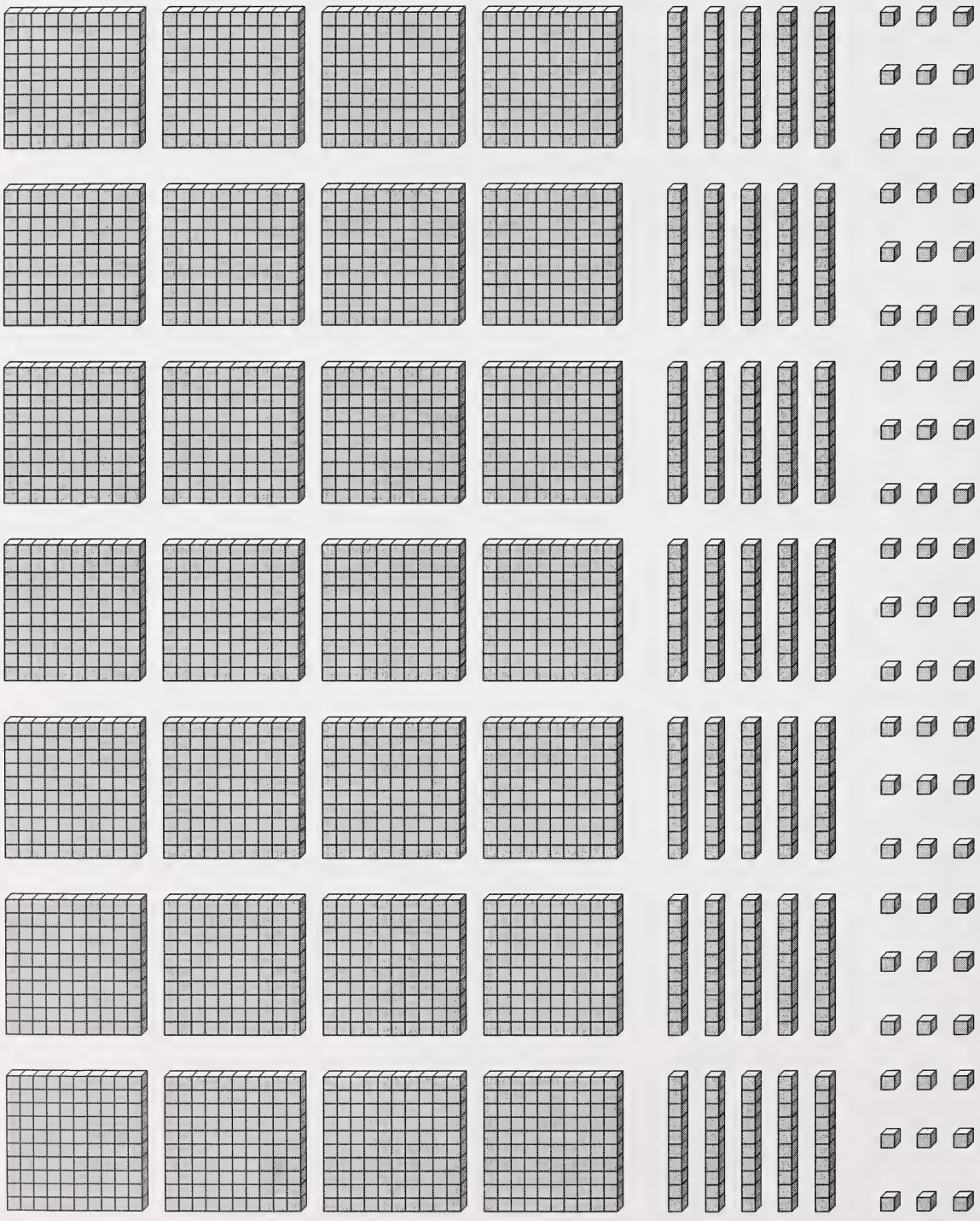
6. Something else I'd like to say is _____

_____

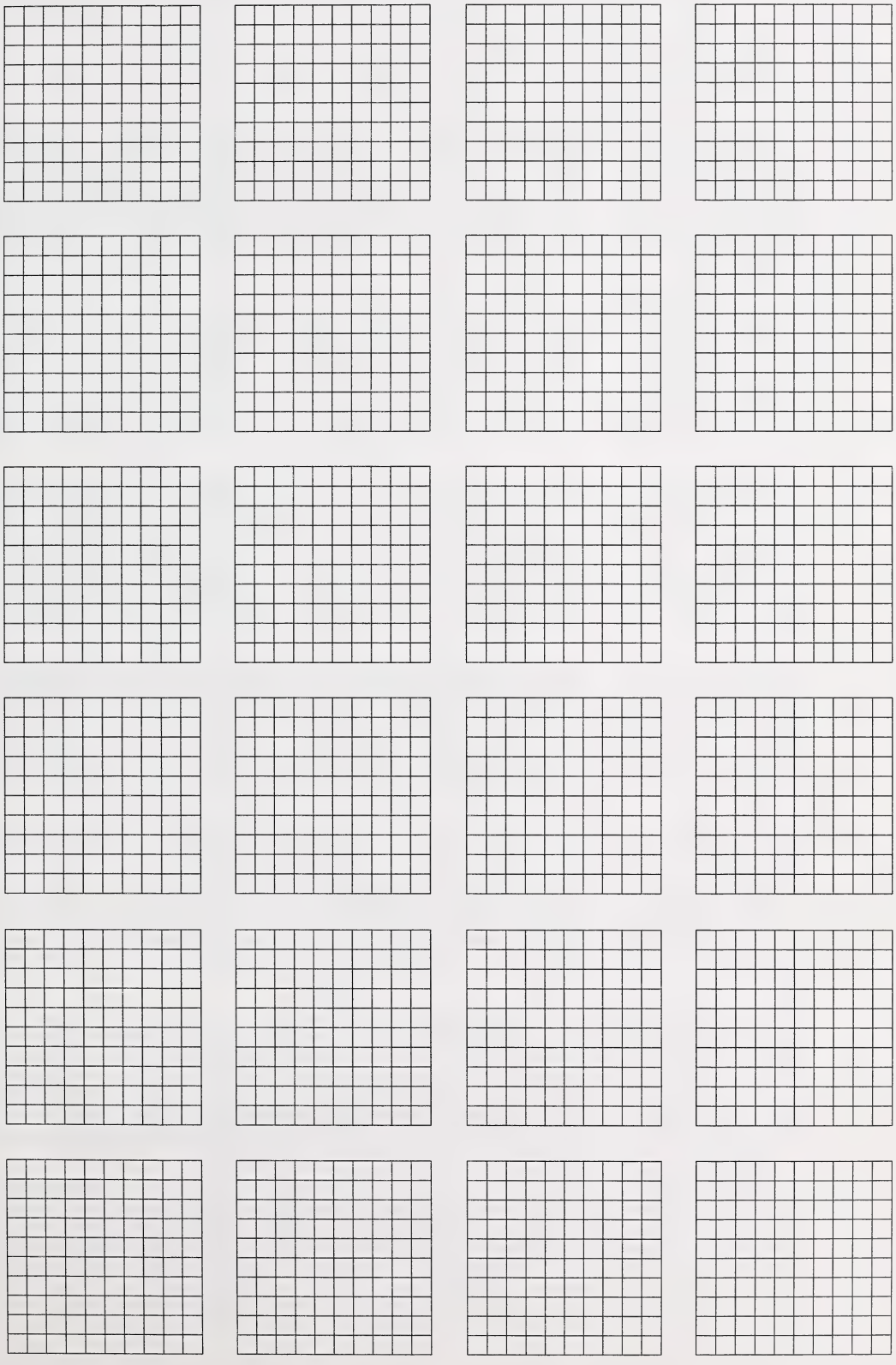
_____

_____

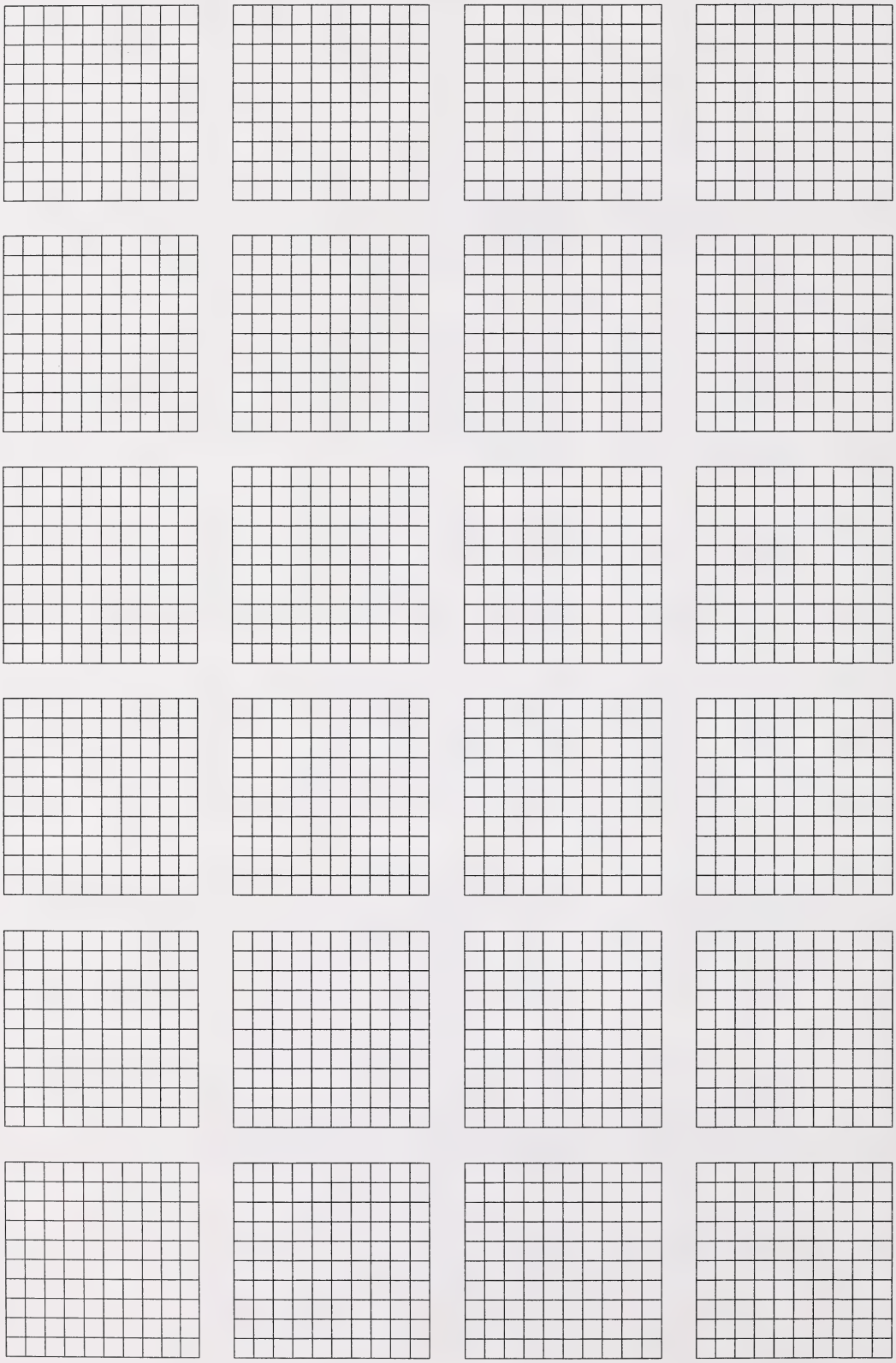
Day 11 Assignment: Base Ten Blocks



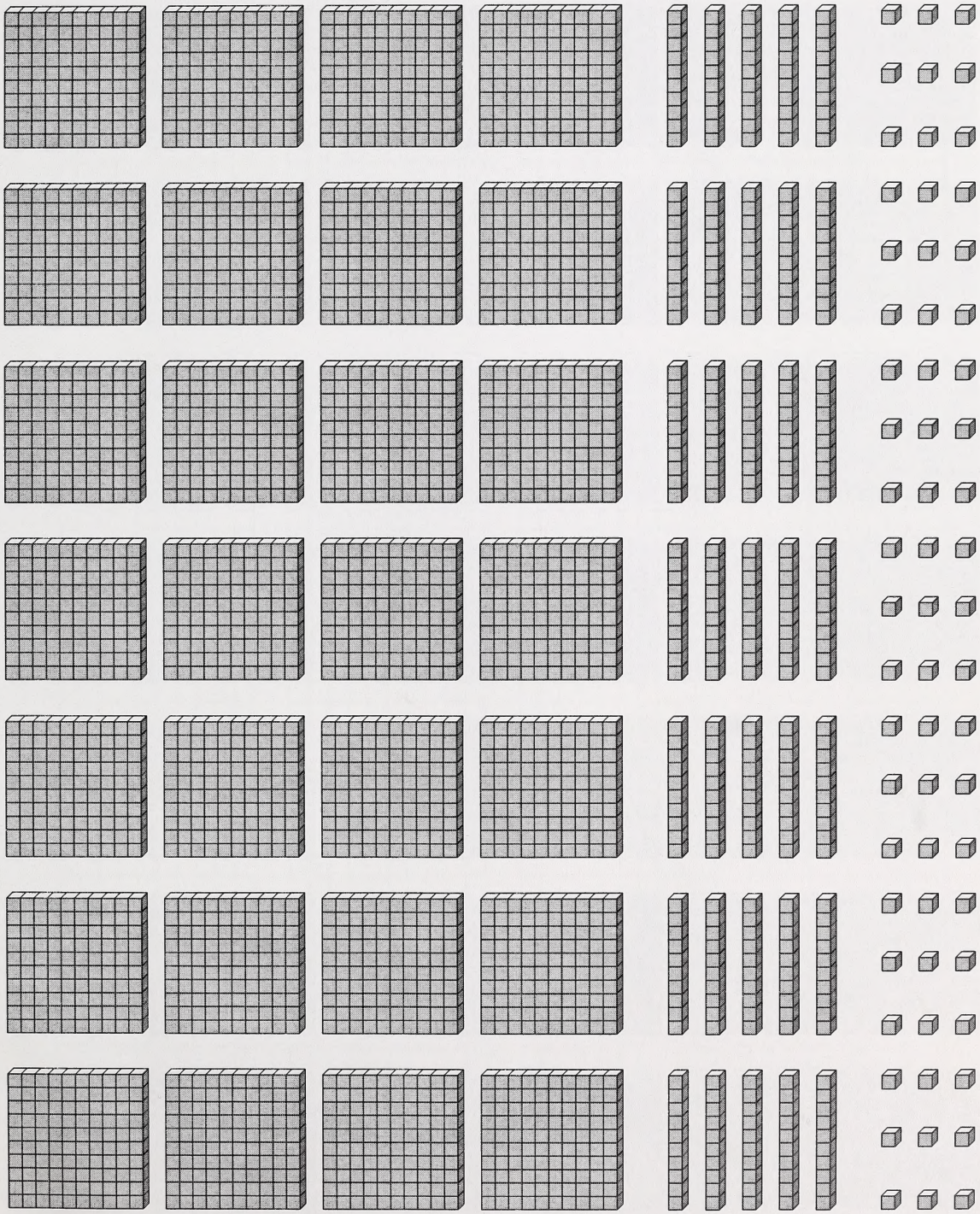
Day 11 Assignment: 10×10 Grids



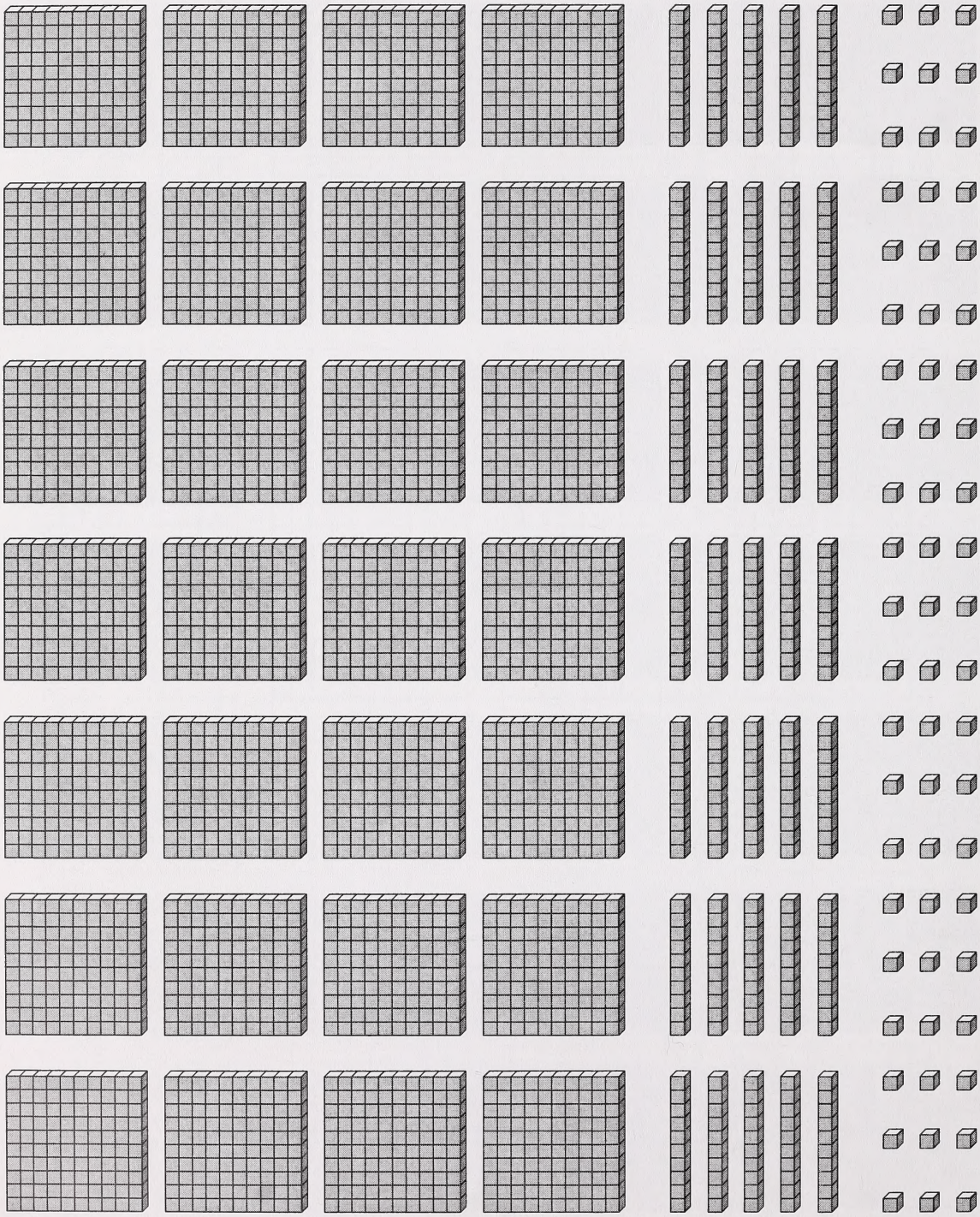
Day 14 Assignment: 10×10 Grids



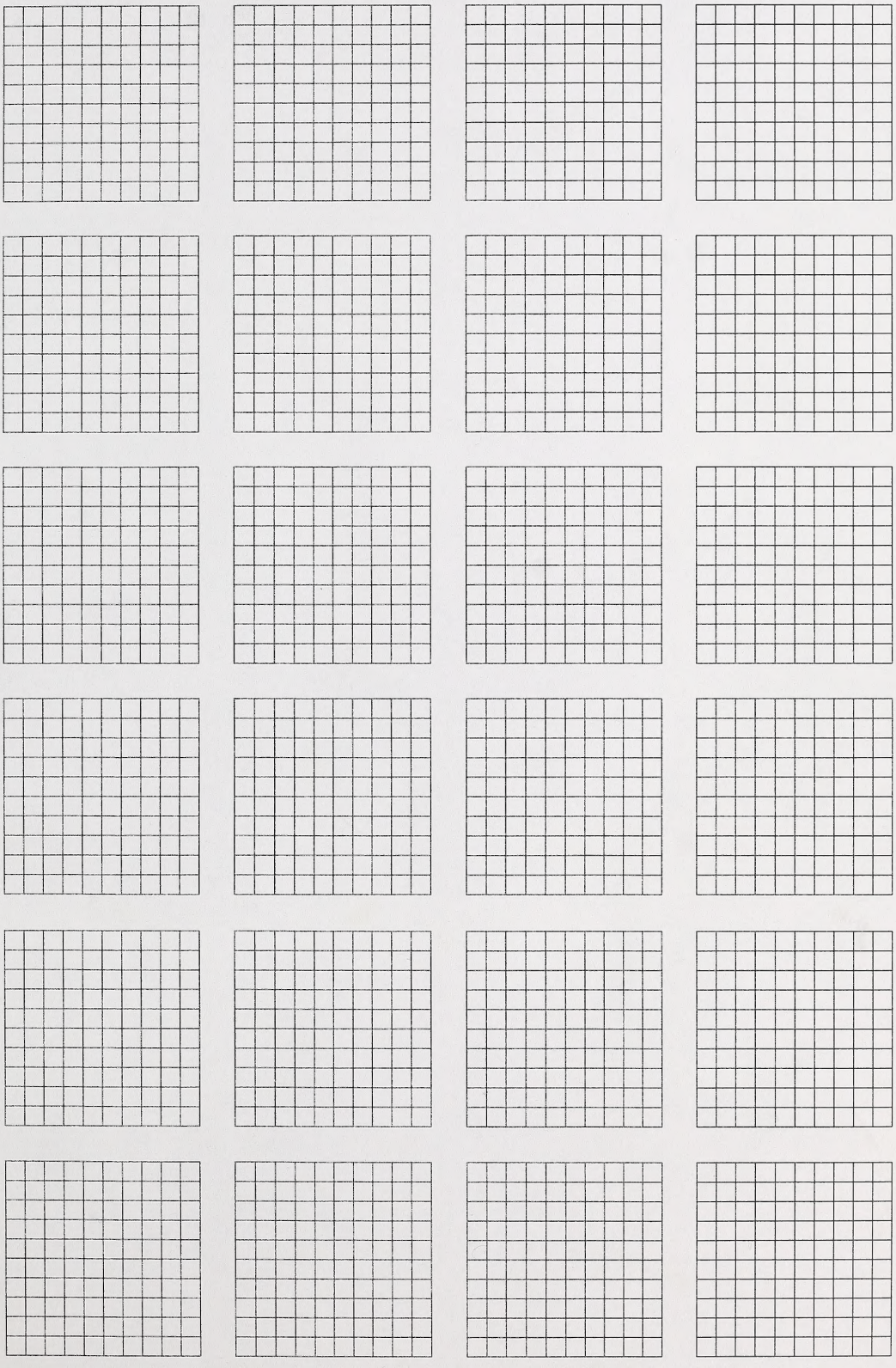
Day 14 Assignment: Base Ten Blocks



Day 15 Assignment: Base Ten Blocks



Day 15 Assignment: 10 × 10 Grids



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Mathematics 4
Assignment Booklet 3B
Module 3

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